

MJS
3826-2

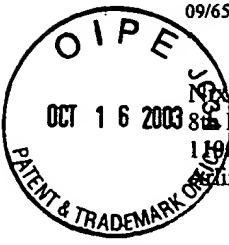
TFW



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,275	09/08/2000	James C. Solinsky	3826-2	3667



7590 10/06/2003
Nelson & Vanderhye PC
8th Floor
1190 North Glebe Rd
Arlington, VA 22201-4714

EXAMINER

SHARON, AYAL I

ART UNIT PAPER NUMBER

2123

DATE MAILED: 10/06/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

DOCKETED

CLT/MATTER # 3826-2
MAIL DATE 10-6-03
DUE DATE Jan 6, 2004
FINAL DEADLINE April 6, 2004
DOCKETED BY polk

RECEIVED

OCT 23 2003

Technology Center 2100



Office Action Summary

Application No.

09/658,275

Applicant(s)

SOLINSKY, JAMES C.

Examiner

Ayal I Sharon

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

RECEIVED

OCT 23 2003

Technology Center 2100

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. Claims 1-32 of U.S. Application 09/658,275 filed on 09/08/2000 are presented for examination. The application claims benefit of provisional application 60/215,762.

Drawings

2. The drawings are objected to because of the following:
 - a. Fig.2 identification is obscured by the "Personal Digital 10" notation.
 - b. Fig.3 arrow(s) are needed between elements 14 and 15.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: p.1, lines 7-8:
delete "Application No. ... entitled" and insert "Application No.09/658,276".
Appropriate correction is required.

Claim Objections

4. Claims 5-8 and 13-16 are objected to because they are apparatus claims that depend from method claims. Appropriate correction is required.
5. Claim 19 is objected to because it incorrectly identifies claim 17 as a method claim. Appropriate correction is required.
6. Claim 27 is objected to because it incorrectly identifies claim 25 as a method claim. Appropriate correction is required.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-3 and 5-8, and Claims 9-11 and 13-16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 6, and 18-21 of copending Application No. 09/658,276. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

- a. The differences between Claims 1 and 9 in the instant application and Claim 1 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model "generates outputs" as opposed to verifying identity. Generating output is an inherent step in the verification process.
- b. The differences between Claims 2 and 10 in the instant application and Claim 2 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model "generates outputs" as opposed to verifying identity. Generating output is an inherent step in the verification process.
- c. The differences between Claims 3 and 11 in the instant application and Claim 6 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model

“generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

- d. The differences between Claims 5 and 13 in the instant application and Claim 18 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model

“generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

- e. The differences between Claims 6 and 14 in the instant application and Claim 19 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model

“generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

- f. The differences between Claims 7 and 15 in the instant application and Claim 20 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model

“generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

- g. The differences between Claims 8 and 16 in the instant application and Claim 21 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model

“generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

9. Claims 17-19 and 21-24, and Claims 25-27 and 29-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 22-23, 27, and 39-42 of copending Application No. 09/658,276. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

- a. The differences between Claims 17 and 25 in the instant application and Claim 22 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model “generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.
- b. The differences between Claims 18 and 26 in the instant application and Claim 23 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model “generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.
- c. The differences between Claims 19 and 27 in the instant application and Claim 27 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model “generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.
- d. The differences between Claims 21 and 29 in the instant application and Claim 39 in Application No. 09/658,276 are: 1) the different intended uses

identified in the preambles of the claims, and 2) the stored model

“generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

e. The differences between Claims 22 and 30 in the instant application and Claim 40 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model “generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

f. The differences between Claims 23 and 31 in the instant application and Claim 41 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model “generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

g. The differences between Claims 24 and 32 in the instant application and Claim 42 in Application No. 09/658,276 are: 1) the different intended uses identified in the preambles of the claims, and 2) the stored model “generates outputs” as opposed to verifying identity. Generating output is an inherent step in the verification process.

10. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 6-8, 14-16, 22-24, and 29-31 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a mathematical algorithm, does not reasonably provide enablement for an integrated circuit or "hardware processing engine". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

More specifically, the applicants provide mathematical equations from an algorithm (for example, see specification, pp.27, 29 31-32). Examiner finds that these could be implemented as a software program, without undue experimentation, by one of ordinary skill in the art. However, the applicants provide only minimal instruction as to how to implement the algorithm in hardware (see Fig.4 and Fig.7). Examiner finds that it would require undue experimentation by one of ordinary skill in the art of hardware design to implement the disclosed mathematical algorithm in hardware.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2123

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. The prior art used for these rejections is as follows:

15. Grossberg et al., U.S. Patent 4,852, 018. (Henceforth referred to as

"Grossberg").

16. Kanevsky et al., U.S. Patent 6,421,453. (Henceforth referred to as **"Kanevsky"**).

17. **Claims 1-2, 4-10, 12-18, 20-26, and 28-32 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kanevsky.**

18. In regards to Claim 1, Kanevsky teaches the following limitations:

1. A method of generating outputs in response to real world stimulation comprising:

capturing concurrent inputs that are responsive to training stimulation;
(Kanevsky, especially: col.6, lines 57-60; col.3, lines 27-38; col.9, lines 23-61)

storing a model representing a synthesis of the captured inputs; and
(Kanevsky, especially: col.3, lines 27-38; col.9, lines 23-61)

using the stored model to generate outputs in response to real-world stimulation.
(Kanevsky, especially: col.3, lines 27-38; col.9, lines 23-61)

19. In regards to Claim 2, Kanevsky teaches the following limitations:

2. The method according to claim 1, further comprising:

using a forced choice interaction to generate one or more additional inputs;
(Kanevsky, especially: col.1, lines 15-24; col.7, lines 48-67; col.8, lines 1-2; col.9, lines 11-22; col.14, lines 17-24)

capturing the additional inputs; and

Art Unit: 2123

(Kanevsky, especially: col.1, lines 15-24; col.7, lines 48-67; col.8, lines 1-2; col.9, lines 11-22; col.14, lines 17-24)

incorporating the additional inputs into the model.

(Kanevsky, especially: col.1, lines 15-24; col.7, lines 48-67; col.8, lines 1-2; col.9, lines 11-22; col.14, lines 17-24)

20. In regards to Claim 4, Kanevsky teaches the following limitations:

4. The method according to claim 1, wherein

the realworld stimulation comprises concurrent inputs that are compared to the stored model, and

(Kanevsky, especially: col.3, line 27 to col.4, line 18;)

the outputs are based on the results of the comparison.

(Kanevsky, especially: col.3, line 27 to col.4, line 18;)

21. In regards to Claim 5, Kanevsky teaches the following limitations:

5. A computer readable medium for storing computer-executable instructions for performing the method of claim 1.

(Kanevsky, especially: col.9, lines 23-60;)

22. In regards to Claim 6, Kanevsky teaches the following limitations:

6. A hardware processing engine configured to perform the method of claim 1.

(Kanevsky, especially: col.9, lines 23-60;)

23. In regards to Claim 7, Kanevsky teaches the following limitations:

7. An application specific integrated circuit configured to perform the method of claim 1.

(Kanevsky, especially: col.9, lines 23-60;)

24. In regards to Claim 8, Kanevsky teaches the following limitations:

8. A net list integrated into other integrated circuits to perform the method of claim 1.

(Kanevsky, especially: col.9, lines 23-60;)

25. Claims 9-16, 17-24, and 25-32 are rejected based on the same reasoning as

claims 1-8, supra.

a. Claims 9-16 are method claims reciting the equivalent limitations as are

recited in method claims 1-8 and taught throughout Kanevsky. The

preamble to Claim 9 recites "control command stimulation" as opposed to

the "real world stimulation" of claim 1, however, these are functionally equivalent and a matter of design choice.

b. Claims 17-24 are system claims reciting the equivalent limitations as are recited in method claims 1-8 and taught throughout Kanevsky.

c. Claims 25-32 are system claims reciting the equivalent limitations as are recited in method claims 1-8 and taught throughout Kanevsky. The preamble to Claim 25 recites "control command stimulation" as opposed to the "real world stimulation" of claim 1, however, these are functionally equivalent and a matter of design choice.

26. Claims 1-2, 4-10, 12-18, 20-26, and 28-32 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Grossberg.

27. In regards to Claim 1, Grossberg teaches the following limitations:

1. A method of generating outputs in response to real world stimulation comprising:

capturing concurrent inputs that are responsive to training stimulation;
(Grossberg, especially: col.1, line 44 to col.2, line 69)

storing a model representing a synthesis of the captured inputs; and
(Grossberg, especially: col.1, line 44 to col.2, line 69)

using the stored model to generate outputs in response to real-world stimulation.
(Grossberg, especially: col.1, line 44 to col.2, line 69)

28. In regards to Claim 2, Grossberg teaches the following limitations:

2. The method according to claim 1, further comprising:

using a forced choice interaction to generate one or more additional inputs;
(Grossberg, especially: col.2, lines 12-16 "... elicit unconditional movements ...)

capturing the additional inputs; and
(Grossberg, especially: col.2, lines 12-16 "... elicit unconditional movements ...)

incorporating the additional inputs into the model.

(Grossberg, especially: col.2, lines 12-16 "... elicit unconditional movements ...)

29. In regards to Claim 4, Grossberg teaches the following limitations:

4. The method according to claim 1, wherein

the realworld stimulation comprises concurrent inputs that are compared to the stored model, and

(Grossberg, especially: col.1, line 44 to col.2, line 69)

the outputs are based on the results of the comparison.

(Grossberg, especially: col.1, line 44 to col.2, line 69)

30. In regards to Claim 5, Grossberg teaches the following limitations:

5. A computer readable medium for storing computer-executable instructions for performing the method of claim 1.

(Grossberg, especially: col.1, line 44 to col.2, line 69)

It is inherent that the algorithms taught by Grossberg can be implemented in

either hardware or software.

31. In regards to Claim 6, Grossberg teaches the following limitations:

6. A hardware processing engine configured to perform the method of claim 1.

(Grossberg, especially: col.1, line 44 to col.2, line 69)

It is inherent that the algorithms taught by Grossberg can be implemented in

either hardware or software.

32. In regards to Claim 7, Grossberg teaches the following limitations:

7. An application specific integrated circuit configured to perform the method of claim 1.

(Grossberg, especially: col.1, line 44 to col.2, line 69)

It is inherent that the algorithms taught by Grossberg can be implemented in

either hardware or software.

33. In regards to Claim 8, Grossberg teaches the following limitations:

8. A net list integrated into other integrated circuits to perform the method of claim 1.

(Grossberg, especially: col.1, line 44 to col.2, line 69)

It is inherent that the algorithms taught by Grossberg can be implemented in either hardware or software.

34. Claims 9-16, 17-24, and 25-32 are rejected based on the same reasoning as claims 1-8, supra.

- a. Claims 9-16 are method claims reciting the equivalent limitations as are recited in method claims 1-8 and taught throughout Grossberg. The preamble to Claim 9 recites "control command stimulation" as opposed to the "real world stimulation" of claim 1, however, these are functionally equivalent and a matter of design choice.
- b. Claims 17-24 are system claims reciting the equivalent limitations as are recited in method claims 1-8 and taught throughout Grossberg.
- c. Claims 25-32 are system claims reciting the equivalent limitations as are recited in method claims 1-8 and taught throughout Grossberg. The preamble to Claim 25 recites "control command stimulation" as opposed to the "real world stimulation" of claim 1, however, these are functionally equivalent and a matter of design choice.

Claim Rejections - 35 USC § 103

35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

36. The prior art used for these rejections is as follows:

37. Grossberg et al., U.S. Patent 4,852, 018. (Henceforth referred to as "**Grossberg**").

38. Kanevsky et al., U.S. Patent 6,421,453. (Henceforth referred to as "**Kanevsky**").

39. Estes et al. U.S. Patent 5,301,284. (Henceforth referred to as "**Estes**").

40. Claims 3, 11, 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky in view of Estes.

41. In regards to Claim 3, Kanevsky teaches software modeling and diagramming.

However, Kanevsky does not expressly teach the following limitations:

3. The method according to claim 1, wherein the model comprises a worldline of linked object diagram exemplars in an N-dimensional space.

Estes, on the other hand, does expressly teach these limitations. (see pcol.8, line 53 to col.11, line 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Kanevsky with those of Estes, because "A long felt need exists for a synthetic method which distinguishes between the essentials of a problem and the formulation of a solution. The separation of problem space formulation and formulation of solution strategies which navigate problem space relationships requires a mechanized method which can be visualized." (Estes, col.8, lines 9-15)

42. Claims 11, 19 and 27 are rejected based on the same reasoning as claim 3, supra.

- a. Claim 11 is a method claim reciting the equivalent limitations as are recited in method claim 3 and taught throughout Kanevsky and Estes. The preamble to Claim 9 recites "control command stimulation" as opposed to the "real world stimulation" of claim 1, however, these are functionally equivalent and a matter of design choice.
- b. Claim 19 is a system claim reciting the equivalent limitations as are recited in method claim 3 and taught throughout Kanevsky and Estes.
- c. Claim 27 is a system claim reciting the equivalent limitations as are recited in method claim 3 and taught throughout Kanevsky and Estes. The preamble to Claim 25 recites "control command stimulation" as opposed to the "real world stimulation" of claim 1, however, these are functionally equivalent and a matter of design choice.

43. Claim 3, 11, 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grossberg in view of Estes.

44. In regards to Claim 3, Grossberg teaches software modeling and diagramming.

However, Kanevsky does not expressly teach the following limitations:

3. The method according to claim 1, wherein the model comprises a worldline of linked object diagram exemplars in an N-dimensional space.

Estes, on the other hand, does expressly teach these limitations. (see pcol.8, line 53 to col.11, line 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Grossberg with those of Estes, because "A long felt need exists for a synthetic method which distinguishes

between the essentials of a problem and the formulation of a solution. The separation of problem space formulation and formulation of solution strategies which navigate problem space relationships requires a mechanized method which can be visualized.” (Estes, col.8, lines 9-15)

45. Claims 11, 19 and 27 are rejected based on the same reasoning as claim 3, supra.

- a. Claim 11 is a method claim reciting the equivalent limitations as are recited in method claim 3 and taught throughout Grossberg and Estes. The preamble to Claim 9 recites “control command stimulation” as opposed to the “real world stimulation” of claim 1, however, these are functionally equivalent and a matter of design choice.
- b. Claim 19 is a system claim reciting the equivalent limitations as are recited in method claim 3 and taught throughout Grossberg and Estes.
- c. Claim 27 is a system claim reciting the equivalent limitations as are recited in method claim 3 and taught throughout Grossberg and Estes. The preamble to Claim 25 recites “control command stimulation” as opposed to the “real world stimulation” of claim 1, however, these are functionally equivalent and a matter of design choice.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayal I. Sharon whose telephone number is (703) 306-0297. The examiner can normally be reached on Monday through Thursday, and the first Friday of a biweek, 8:30 am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on (703) 305-9704. Any response to this office action should be mailed to:

Director of Patents and Trademarks
Washington, DC 20231

Hand-delivered responses should be brought to the following office:

4th floor receptionist's office
Crystal Park 2
2121 Crystal Drive
Arlington, VA

The fax phone numbers for the organization where this application or proceeding is assigned are:

All communications: (703) 872-9306

Or, alternatively:

Official communications:	(703) 746-7239
Non-Official / Draft communications	(703) 746-7240
After Final communications	(703) 746-7238

Art Unit: 2123

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is: (703) 305-3900.

Ayal I. Sharon

Art Unit 2123

September 25, 2003



SAMUEL BRODA, ESQ.
PRIMARY EXAMINER

INFORMATION DISCLOSURE (CITATION)

TTY. DOCKET NO.

AL NO.

3826-2

09/658,275

APPLICANT

James C. Solinsky

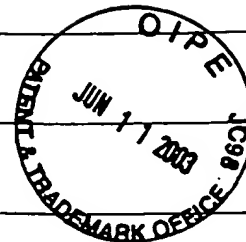
(Use several sheets if necessary)

FILING DATE

GROUP

September 8, 2000

2123



U.S. PATENT DOCUMENTS

[illegible]

RECEIVED

JUN 12 2003

Technology Center 2100

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

[illegible]

***Examiner**

April L. Sharon

9/17/03
Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

INFORMATION DISCLOSURE
CITATION

ATTY. DOCKET NO.

SERIAL NO.

3826-2

09/658,275

APPLICANT

SOLINSKY

FILING DATE

September 8, 2000

GROUP

2123

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>ayal</i>	3,970,992	07/1976	BOOTHROYD et al.	340	172.5	
<i>ayal</i>	4,906,940	03/1990	GREENE et al.	382	16	
<i>ayal</i>	5,506,580	04/1996	WHITING et al.	341	51	
<i>ayal</i>	5,548,755	08/1996	LEUNG et al.	395	600	
<i>ayal</i>	5,586,218	12/1996	ALLEN	395	10	
<i>ayal</i>	5,701,400	12/1997	AMADO	395	76	
<i>ayal</i>	5,712,960	01/1998	CHIOPRIS et al.	395	77	
<i>ayal</i>	5,768,586	06/1998	ZWEBEN et al.	395	653	
<i>ayal</i>	5,778,378	07/1998	RUBIN	707	103	
<i>ayal</i>	5,790,116	08/1998	MALONE et al.	345	335	
<i>ayal</i>	5,794,001	08/1998	MALONE et al.	395	342	
<i>ayal</i>	5,806,075	08/1998	JAIN et al.	707	201	
<i>ayal</i>	5,832,205	11/1998	KELLY et al.	395	185.06	
<i>ayal</i>	5,893,106	04/1999	BROBST et al.	707	102	
<i>ayal</i>	5,875,108	02/1999	HOFFBERG et al.	364	146	
<i>ayal</i>	5,900,870	05/1999	MALONE et al.	345	333	
<i>ayal</i>	5,905,855	05/1999	KLAIBER et al.	395	183.07	
<i>ayal</i>	5,911,581	06/1999	REYNOLDS et al.	434	236	
<i>ayal</i>	5,915,252	06/1999	MISHESKI et al.	707	103	
<i>ayal</i>	5,926,832	07/1999	WING et al.	711	141	
<i>ayal</i>	5,936,860	08/1999	ARNOLD et al.	364	468.01	
<i>ayal</i>	5,953,707	09/1999	HUANG et al.	705	10	
<i>ayal</i>	5,958,061	09/1999	KELLY et al.	714	1	
<i>ayal</i>	5,966,712	10/1999	SABATINI et al.	707	104	
<i>ayal</i>	5,970,482	10/1999	PHAM et al.	706	16	
<i>ayal</i>	5,978,790	11/1999	BUNEMAN et al.	707	2	
<i>ayal</i>	5,991,776	11/1999	BENNETT et al.	707	205	
<i>ayal</i>	5,995,958	11/1999	XU	707	3	
<i>ayal</i>	5,999,940	12/1999	RANGER	707	103	
<i>ayal</i>	6,002,865	12/1999	THOMSEN	395	600	
<i>ayal</i>	6,003,024	12/1999	BAIR et al.	707	3	
<i>ayal</i>	6,006,230	12/1999	LUDWIG et al.	707	10	
<i>ayal</i>	6,009,199	12/1999	HO	382	224	
<i>ayal</i>	6,011,908	01/2000	WING et al.	395	182.17	
*Examiner	<i>ayal J. Shoren</i>		Date Considered	9/17/03		

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

INFORMATION DISCLOSURE
CITATION

ATTY. DOCKET NO.

SERIAL NO.

3826-2

09/658,275

APPLICANT

SOLINSKY

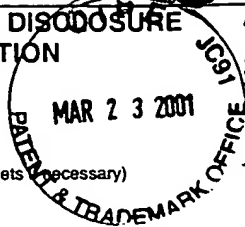
FILING DATE

GROUP

September 8, 2000

2123

(Use several sheets if necessary)



RECEIVED
MAR 26 2001
Technology Center 2100

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

April	Booch, <i>Object-Oriented Analysis and Design</i> , Benjamin/Cummings Pub., Co., Redwood City, CA, 1994, pp. 3-79, 81-83, 97-104 and 155-157
April	Coad, et al., <i>Object-Oriented Analysis</i> , Prentice-Hall Inc., Englewood Cliffs, NJ, 1991, pp.30-55
April	Fowler, et al., <i>UML Distilled - A Brief Guide to the Standard Object Modeling Language</i> , Addison-Wesley, Menlo Park, CA, 2000, pp. 49-58 and 79-89
April	Rumbaugh, et al., <i>The Unified Modeling Language Reference Manual</i> , Addison-Wesley, Menlo Park, CA, 1999, pp. 58-61, 165-169 and 307-311
April	Booch, et al., <i>The Unified Modeling Language User Guide</i> , Addison-Wesley, Menlo Park, CA, 1999, pp. 4-11, 24-26, 50-51, 105-107, 195-200
April	Li, <i>A Prolog Database System</i> , Department of Computer Science, Heriot-Watt University, Edinburgh, UK, 1984, pp. 1-43
April	Dreyfus, Hubert and Stuart, <i>Why Computers May Never Think Like People</i> , Harvard Technology Review, January 1986, pp. 44-61
April	Nii, et al., <i>Signal-to-Symbol Transformation: HASP/SIAP Case Study</i> , AI Magazine, 1982, pp. 23-35
April	Solinsky, <i>The Use of Expert Systems in Machine Vision Recognition</i> , VISION '86 Conference, Detroit, MI, June 1986, pp. 4-139
April	Solinsky, <i>A Generalized Image Enhancement for Machine Vision Architecture</i> , Ultratech-Vision West Conference, Long Beach, CA, September 1986, 47-65
April	Solinsky, <i>A Generalized Feature Extraction Approach</i> , VISION '87 Conference, Detroit, MI, June 1987, pp. 57-79
April	Solinsky, <i>Machine Vision Tutored Learning Using Artificial Neural Systems Classification</i> , VISION '88 Conference, Detroit, MI, June 1988, pp. 1-13
April	Solinsky, <i>An Artificial Intelligence Perspective on the Sonar Problem - Recognition Control Strategy in A Relationship Data Base</i> , Rockwell International, Anaheim, CA, October 1985, pp. 1-37
April	Solinsky, <i>A Man/Machine Performance Model for Analyzing Sonar System Designs</i> , Rockwell International, Anaheim, CA, December 1986, pp. 1-63
April	Solinsky, <i>Evaluating System Performance in Low False Alarm Rate Regimes</i> , Advanced Systems Division, Science Applications International Corporation, La Jolla, CA, February 1992, pp. 1-9
April	Solinsky, <i>A Method for Compact Information Characterization in a Finite, Discrete Data Set</i> , , Advanced Systems Division, Science Applications International Corporation, La Jolla, CA, April 1993, pp. 1-4
April	Solinsky, <i>Intelligent Information Systems - Evolutionary Computational Tools in An Information Computer</i> , Science Applications International Corporation White Paper, San Diego, CA, February 1995, pp. 1-5
April	Gelernter, <i>The Muse in the Machine - Computerizing the Poetry of Human Thought</i> , Free Press Division of MacMillan, Inc., New York, NY, 1994, pp. 16-26
April	Murphy, et al., <i>Automated Model Correlator and Metamodel Building Environments</i> , Accord Solutions, Small Business Innovation Research Program, Department of Defense, Proposal A95-065, January 1995, pp. 1-24
April	<i>The Information Computer - An Intelligent Systems Component for Consistent Abstraction of Collaborator Experience</i> , Accord Solutions, Proposal 960101, 1996, pp. 1-25
April	Accord Solutions ATP Proposal <i>Components for a Concurrent Paradigm</i> , May 1997, pp. 1-11, 13-24, 26-41

*Examiner

Date Considered

9/19/03

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

INFORMATION DISCLOSURE
CITATION

ATTY. DOCKET NO.

SERIAL NO.

3826-2

09/658,275

APPLICANT

SOLINSKY

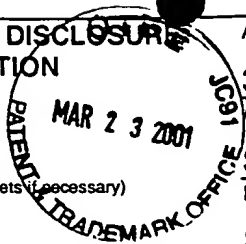
FILING DATE

GROUP

September 8, 2000

2123

(Use several sheets if necessary)



RECEIVED
MAR 26 2001
Technology Center 210

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

Appl	Solinsky, <i>The Information Computer</i> , Accord Solutions – briefing presented to McDonnell Douglas Corp., and Cubic Corp., 1995-1996, pp. 1-8
Appl	Klir, et al., <i>Advances in Computers</i> , Vol. 36, edited by Marshall C. Yovits, Academic Press, New York, NY, 1993, pp. 254-332
Appl	Zadeh, <i>Fuzzy Sets</i> , Information and Control 8, Department of Electrical Engineering and Electronics Research Laboratory, University of California, Berkeley, 1965, pp. 338-353
Appl	Shannon, <i>A Mathematical Theory of Communication</i> , The Bell Systems Technical Journal, Vol. XXVII, July 1948, pp. 379-423
Appl	Hartley, <i>Transmission of Information</i> , The Bell Systems Technical Journal, Journal 1, 1928, pp. 535-563
Appl	Zadeh, <i>Fuzzy Sets As a Basis for a Theory of Possibility</i> , The Bell Systems Technical Journal 1 (1), 1978, pp. 3-28
Appl	Shafer, <i>A Mathematical Theory of Evidence</i> , Princeton University, Princeton, NJ, June 1975, pp. 3-286
Appl	Shafer, <i>Belief Functions and Possibility Measures</i> , Analysis of Fuzzy Information, Vol. 1, edited by J.C. Bezdek, CRC Press, Boca Raton, FL, 1985, pp. 51-84
Appl	Dempster, <i>Upper and Lower Probability Inferences Based on A Sample from A Finite Univariate Population</i> , Harvard University, a) Biometrika, 54, pp. 515-528, b) Annals of Mathematical Statistics, 38, pp. 325-339, 1967
Appl	Eliot, <i>Ruling Neural Networks</i> , AI Expert, February 1995, pp. 8-10
Appl	Solinsky, et. al., <i>Higher-Order Statistical Applications in Acoustics with Reference to Nonlinearities in Chaos</i> , Third International Symposium on Signal Processing Applications (HOSSPA 92), Gold Coast, Queensland, Australia, 1992
Appl	Solinsky, et al., <i>Signal Analysis Applications of Nonlinear Dynamics and Higher-Order Statistics</i> , SPIE, Vol. 2037, Chaos/Dynamics, San Diego, CA, 1993, pp. 162-179
Appl	Kendall, et al., <i>The Advanced Theory of Statistics</i> , Vols. I-III, MacMillan Publishing Co., Inc., New York, 1997, pp. 82-89, pp. 1-5, pp. 292-298,
Appl	Solinsky, et al. <i>Neural-Network Performance Assessment in Sonar Applications</i> , IEEE Conference on Neural Nets in Ocean Engineering Applications, Washington, DC, August, 1991, pp. 1-12
Appl	Lippmann, <i>An Introduction to Computing with Neural Nets</i> , IEEE Acoustics, Speech and Signal Processing Magazine, April 1987, pp. 4-22
Appl	Griffith, <i>Mathematical Neurobiology – An Introduction to the Mathematics of the Nervous System</i> , Chapter 8, Academic Press, New York, NY, 1971, pp. 132-147
Appl	Solinsky, <i>Trispectrum Utilization in Higher Order Statistical Applications</i> , Proceedings of IEEE Conference on HOS, Grenoble, France, 1991. Also in <i>Higher Order Statistics</i> , J.L. Lacoume Editor, Elsevier Science, Ltd., Netherlands, 1992
Appl	Churchland, et al., <i>The Computational Brain</i> , MIT Press, Cambridge, MA, 1992, pp. 1-478
Appl	Lee, <i>Independent Component Analysis – Theory and Applications</i> , Computational Neurobiology Laboratory, The Salk Institute, La Jolla, CA, 1998, pp. 1-41

*Examiner Appl. L. Shazou Date Considered 9/17/03

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Notice of References Cited

Application/Control No.

09/658,275

Applicant(s)/Patent Under
Reexamination
SOLINSKY, JAMES C.

Examiner

Ayal I Sharon

Art Unit

2123

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-4,852,018	07-1989	Grossberg et al.	700/259
	B	US-5,301,284	04-1994	Estes et al.	711/203
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.